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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/827,015

04/05/2001

Robert Osann JR.

3460

22470

7590

06/09/2005

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EXAMINER

NGUYEN, LINH M

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

09/827,015

Applicant(s)

OSANN ET AL.

Examiner

Linh M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-42, 48 and 51-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-42 and 48 is/are allowed.
- 6) ☒ Claim(s) 51-53 is/are rejected.
- 7) ☒ Claim(s) 54-56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/24/03, 04/28/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a reply to the Applicants' amendment submitted on 07/12/ 2004. By virtue of this amendment, claims 31-42, 48 and 51-56 are now presented in the instant application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 51-53 are rejected under 35 U.S.C. 102(b) as being anticipated by McClintock et al. (U.S. Patent No. 5,543,732).

With respect to claim 51, McClintock et al. discloses, in Fig. 2, a programmable logic array (PLA) having a depopulated array that includes programmable connections only where required to implement certain known functionality (*See col. 7, lines 19-25*).

With respect to claim 52, McClintock et al. discloses, in Fig. 2, that the depopulated array is an AND array (*See col. 4, lines 49-50*).

With respect to claim 53, McClintock et al. discloses, in Fig. 2, that the depopulated array is an OR array (*See col. 4, lines 49-50*).

Allowable Subject Matter

3. Claims 31-42 and 48 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

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5. Claims 54-56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art fails to disclose or suggest (1) a PLA having a depopulated array that includes programmable connections which are selectively minimally repopulated to accommodate future programming of other functionality, as called for in independent claims 31 and 40, (2) the first type of programmable connection includes a pair of storage devices and a multiplexer, and the second type of programmable connection includes only one storage device and a logic gate, as called for in claim 48, (3) the PLA includes programmable connections that include a storage device and a logic gate; and product terms and sum terms formed with gate trees, as called for in claim 54, (4) the PLA includes programmable connections that include a pair of storage devices and a multiplexer, as called for in claim 55, and (5) the PLA includes an AND array that includes programmable connections that each include a pair of storage devices and a multiplexer, and an OR array that includes programmable connections that each include only one storage device and a logic gate, as called for in claim 56.

Remarks and conclusion

6. Applicant's arguments filed 07/12/04 have been fully considered but they are not persuasive.

7. With respect to the Applicant's argument regarding claim 51, at page 3, last paragraph; the Applicant stated "there is nothing in McClintock that teaches or suggests that any "depopulation" occurred in order to create such partially "populated" intersections. The examiner does not find the Applicant's argument convincing. With broadest reasonable interpretation

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“depopulated” (as in line 2 of claim 51) includes the definition of -not fully populated-. Hence McClintock does indeed disclose a programmable logic array having a depopulated array (see col. 7, lines 19-25).

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (703) 305-0414. The examiner can normally be reached on Alternate Mon, Tuesday - Friday from 7:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P Callahan can be reached on (703) 308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-0142 for regular communications and (703) 305-0142 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Linh M. Nguyen
Examiner
Art Unit 2816

LMN
June 8, 2005

A handwritten signature in black ink, appearing to read 'Linh M. Nguyen', followed by a long horizontal line extending to the right.